Abstract

Background

Fever is a common symptom in children, which creates great anxiety to parentsand caregivers. They have perceived temperature reduction as the primary goal, perhaps at the expense of more important issues and reaction of the health professional may reinforce these concerns, when fever is managed as an illness rather than a symptom.

During fever, paracetamol and nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and diclofenac sodium do effectively reset the ‘central thermostat’ and whether used alone or in combination, they usually result in a reduction in body temperature (2). The overall well-being of the child's condition strongly reinforces the practice of giving antipyretics and appears to be the one therapeutic objective in busy general practices. In a country like Sri Lanka where Dengue Hemorrhagic Fever is endemic and still carrying a significant mortality rate the health care professionals should take more responsibility in avoiding the use of NSAIDs.

Objectives

To identify knowledge, attitude and practices on management of fever including dengue fever among general practitioners, and the impact of educational programs which concern fever and dengue fever management in the primary health care level.

Methods

A preliminary audit on management of febrile children by primary care physician prior to hospital admission was carried out by retrospective analysis of bed head tickets patients who were admitted over a period of 3 months.

Main study was conducted in 2 phases. Phase 1 consisted of assessment of knowledge and perceptions of management of fever/febrile phase of DF/DHF (primary health care practitioner/GP) in Dehiwala, Mt.Lavinia municipal council area. It was followed by a seminar anddistribution of study material (lecture on a video compact discin June 2012. In Phase II, post intervention knowledge and perception were assessed.

Results

Total of 429 patient records were analysed in preliminary BHT audit.69.2% has consulted a GP before admitting to the hospital. Mean age was 6.14yrs (SD ± 3.516). 52.31 % of them were males. 46.7 % of patients admitted from Dehiwala and Moratuwa MOH areas and 50.63% of sample were casualty admissions. Of them, 42.64 % were diagnosed as DF/DHF (25.99 % had DHF). 11.8 % have been prescribed both NSAID and antibiotics. Commonest NSAID prescribed was Mefenamic Acid (65.06%) and antibiotic was Amoxicillin (30.46 %).

98.9% of general practitioners used paracetamol as their 1st line antipyretic drug and 24.2% of GPs considered NSAIDs (Non steroid Anti-inflammatory Drugs) as their 2nd line antipyretic agent. 28.3 % GPs stated that they often (> 5%) prescribe NSAIDs. 25% of sample said that they want to bring down the temperature to reduce parental anxiety. 87.9 % GPs agreed upon antibiotics should not be prescribed to children with fever without apparent focus.92.4% of primary health care practitioners were aware of the correct age range which febrile convulsions can appear.

Mean overall score for the knowledge was 75.1 %(±8.79). Following the intervention, overall statistically significant knowledge improvement was 84.9 %(±7.28) (p value <0.001). Also improvement of knowledge was seen in the area of differentiation DHF from DF (p value <0.001, OR = 0.087, CI 0.036 - 0.211), when to suspect Dengue (Z = -4.447, p value <0.001), timeof doing FBC (Z = - 2.370.p value = 0.018), when to arrange hospital admission (Z =-2.568, p value = 0.01), identification of warning signs (Z =-3.757,

p value <0.001), Risk group identification (Z =-5.319, p value <0.001) and detection of earliest haematological findings (Z = -3.975, p value <0.001).

Conclusions

Education workshops and seminars to primary health care professionals are important, especially improvement of their knowledge on dengue fever and management of a febrile child withoutan obvious focus, because Sri Lanka is one of the dengue endemic country and most of the Sri Lankan children go to consult primary health care practitioners before coming to a hospital. Maintaining a database of general practitioners is recommended to facilitate dissemination information about workshops, seminars and guideline updates to improve their existing knowledge